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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,769	07/17/2003	Peter Graham Foster	P07693US01/RFH	9158
881	7590	10/19/2007	EXAMINER	
STITES & HARBISON PLLC 1199 NORTH FAIRFAX STREET SUITE 900 ALEXANDRIA, VA 22314			NGUYEN, TANH Q	
			ART UNIT	PAPER NUMBER
			2182	
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			10/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/620,769	Applicant(s) FOSTER ET AL.	
	Examiner Tanh Q. Nguyen	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2007 and 09 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-39, 41 and 51-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-39, 41 and 51-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on August 9, 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on application no. 11/271,799 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 32-41, 51-54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 32-41, 51-54 are also rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 32 recites "generating or designating specific signal structures for

transmission to the plurality of USB devices" in lines 8-9.

Claim 32 also recites "transmitting to each of said plurality of USB devices at least one of said specific signal structures" in lines 10-11.

Claim 32 recites "monitoring local USB signals at each of said plurality of USB devices for said specific signal structures" in lines 12-13. This limitation suggests that any of the specific signal structures are being monitored, and appears to be consistent with the recitations in lines 8-9 and 10-11. The examiner is however not clear on whether applicant meant to recite "said specific signal structures" or "said at least one of said specific signal structures". Clarification is required.

Claim 32 recites "generating a plurality of local reference signals, each local signal corresponding to each respective one of said plurality of USB devices from said specific signal structures received at each of said plurality of USB devices" in lines 14-17. This limitation suggests more than one specific signal structures are being received at each of the USB devices, and appears to contradict the recitation in lines 10-11 because the recitation in lines 10-11 may require only one specific signal structure being transmitted to each of the USB devices - hence only one specific signal structure being received at each of the USB devices. It appears that "said at least one of said specific signal structures" is more appropriate than "said specific signal structures" for the recitation in lines 14-17. Clarification is required.

6. Claim 32 recites the limitation "(b)" in line 23, followed by (i)-(ix) in lines 25-53. There is no recitation associated with (b). Since (i)-(ix) appears to be steps for determining a plurality of relative propagation times, it is not clear whether applicant

intends to recite "(b) determining relative propagation times with respect to a reference USB device".

7. Claim 32 recites "(i) designating a master USB device in said USB tree for monitoring traffic on said USB to and from each of said plurality of USB devices" in lines 25-26. It is not clear that the specification supports the existence of a master USB device, and the master USB device is designated for monitoring traffic to and from each of said plurality of USB devices. Instead, it appears the specification supports designating one of the USB devices as a master USB device for monitoring traffic to and from each of said plurality of USB devices, hence "(i) designating one of said plurality of USB devices in the USB tree as a master USB device for monitoring traffic to and from each of said plurality of USB devices" is more appropriate than the current recitation. Clarification is required.

Furthermore, it is not clear what "monitoring traffic on said USB to and from each of said plurality of USB devices" means. It is not clear what "traffic" means. It appears that the recitation suggests monitoring traffic between the plurality of USB devices. The recitation also suggests that the traffic to and from the master USB device is also monitored. It is not clear whether the specification supports such limitations. Clarification is required.

8. Claim 32 recites the limitation "(ii) generating or designating specified signal structures for transmission to said plurality of USB devices" in lines 27-28. The recitation suggests signal structures that are different than the signal structures in lines

8-9 (specified signal structures instead of specific signal structures). It is not clear whether the specification supports the signal structures for locking the local clocks being different than the signal structures for determining propagation times. If the signal structures for locking the local clocks are not different than the signal structures for determining propagation times, then (ii) should be removed to prevent interpretation of the signal structures for locking the local clocks being different than the signal structures for determining propagation times. In addition "specified signal structures" should be replaced with "specific signal structures" in (iv)-(v). Clarification is required.

9. Claim 32 recites the limitation "(iv) monitoring said traffic on said USB with said master USB device for said specified signal structures and for specified response signals from said plurality of USB devices" in lines 31-33. The recitation suggests specified signal structures...from the plurality of USB devices. It also appears that the term "traffic" is clouding the subject matter being claimed. It would be clearer to recite "(i) designating one of said plurality of USB devices in the USB tree as a master USB device", "(iii) transmitting said specified signal structures to each of said plurality of USB devices and transmitting specified response signals from said plurality of USB devices", and "(iv) monitoring for said specified signal structures and for specified signal response signals".

10. Claim 32 recites "(vi) generating second event triggering signals local to said master USB device corresponding to decoding of response signals from said plurality of USB devices" in lines 36-38. The recitation suggests that the response signals from the

plurality of USB devices being different from the specified response signals in line 32. It is not clear whether the specification supports the response signals in line 37 being different from the specified response signals in line 32. If the response signals in line 37 is not different from the specified response signals in line 32, then it would be clearer to recite "(vi) generating second event triggering signals local to said master USB device corresponding to decoding of said specified response signals". Clarification is required.

11. Claim 32 recites "(viii) determining a plurality of propagation times, each propagation time from said master USB device to each one of said plurality of USB devices being determined from said time interval corresponding to each one of said plurality of USB devices" in lines 42-45. The recitation suggests a propagation time from the master USB device and each one of the plurality of USB devices - hence includes the propagation time from the master USB device to the master USB device. It appears that applicant meant to include the propagation time from the master USB device to the master USB device. Clarification is required.

It is also not clear how the propagation time is determined from the time interval measured in (vii). The specification appears to support the propagation time being the time interval measured in (vii).

12. Claim 32 recites the limitation (ix) in lines 46-53. The limitation (ix) suggests that the reference USB device being not necessarily the same as the master USB device, but may be the same as the master USB device. Clarification is required.

13. Claim 35 recites the limitation "the command sequences" in line 2, and "the data

sequences" in line 3. There is insufficient antecedent basis for such limitations in the claim.

14. Claim 37 recites the limitation "the command sequences" in lines 2-3, and "the data sequences" in line 3. There is insufficient antecedent basis for such limitations in the claim.

15. No prior art rejection was made because the claims, as recited, do not enable the examiner to interpret the claims without requiring the examiner to make a great deal of speculation.

If applicant believes that the claims are correctly recited, the examiner request that applicant provides support for the subject matter being claimed (i.e. maps the limitations of at least claim 32 to specific sections of the specification - by page and line numbers, drawings and labels, as appropriate).

The examiner also suggests that applicant requests an interview to go over the subject matter that applicant intends to claim - should an amendment be necessary in furthering the prosecution of the application.

Response to Arguments

16. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanh Q. Nguyen whose telephone number is 571-272-4154. The examiner can normally be reached on M-F 9:30AM-7:00PM.

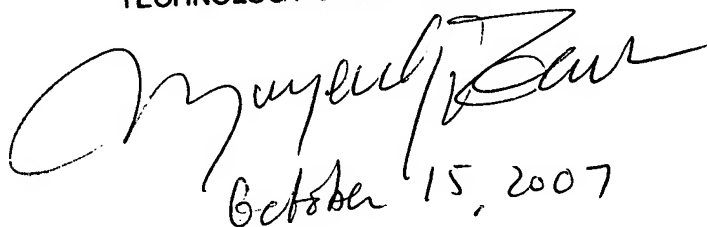
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 2182

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TANH Q NGUYEN
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100



October 15, 2007

TQN
October 15, 2007